

**REMARKS**

Regarding the objection to the drawings in paragraph 1 of the Office Action, enclosed is a copy of the drawing sheet containing Figure 4 wherein a correction with respect to element 7 is shown in red. Upon approval of this drawing, the change will be made.

Regarding the arrangement of the specification, applicant has provided herein a substitute specification conforming with the requirements of 37 C.F.R. 1.77(b). No modification to the subject matter has been made except to provide an abstract, to modify the specification so as not to refer directly back to the claims, and to provide a new title.

Responding more specifically, the new title is shown at paragraph [00001] of the substitute specification. The first paragraph of the original specification is now found as the first paragraph of the Summary of the Invention at paragraph [00010] of the substitute specification. The third full paragraph on page 2 has been changed by explicitly stating the features as described in the claims, incorporating directly the language of the claims of the specification, as shown in paragraphs [00012] through [00016] of the substitute specification. Support is found directly in the language of claims 1-17.

Applicant will respond specifically to each of the objections to the claims made on pages 3-5 of the Office Action. As an initial matter, attached hereto is a marked-up version of the changes made to the claims by the current Amendment, entitled "Version With Markings To Show Changes Made". The nature of the changes made can be readily determined from its inspection, and from its remarks made below which generally follow the order of the comments made in the Office Action.

The word "form" in the phrase "a cam shaft form a tube" has been changed to "from" so that the phrase reads "a cam shaft from a tube."

Claims 5-7 now depend from claim 1 so that the objection is obviated.

Regarding the rejection of claims 1-4 and 8-17, please note that the original specification at page 2, lines 29-33 (paragraph 0019 of the substitute specification) the tube of material is described as being deformed by the known method of kneading, completely or partially, which means that the regions where the cams are seated and be kneaded. With regard to the further rejection under 35 U.S.C. § 112, in paragraph 8 of the Office Action, the claims have been amended to overcome the several objections. Thus, it is believed that the limitation "action of axial forces" does not need antecedent basis by the manner by which it is now used, namely "which can be deformed by the action of axial forces". Thus the language is used in a preamble manner, which therefore provides antecedent basis for the use of the phrase "action of axial forces" on line 5 of the amended claim.

The term "a high" in claim 1 has been deleted.

With regard to the phrase "the bearer rings" in line 3 of claim 1, the language of the claims has been changed so that the phrase "characterized in that the bearer rings, which are produced in a separate method and correspond to the outlines of the cams... are placed ..." so that it reads "characterized in that bearer rings are produced in a separate method corresponding to the outline of the cams...and are placed...".

The phrase "the outline of the cams" does not require antecedent basis because it is now described as "the outline of the cams on said cam shaft", and finds antecedent basis from the preamble use of the phrase "cam shaft" on line 1 of claim 1. A cam shaft necessarily has cams.

The phrase "the desired hardness, strength and resistance to wear" has been deleted, obviating the objection.

The modifier "high" has been deleted so that the phrase now reads "an internal pressure". The objection to claim 2 on the basis that it is considered indefinite with

respect to the phrases "certain region" and "preferably ends of the tube", and the further objection to claim 2 with respect to the phrase "which are clear of the region" are believed obviated by the modification wherein all those phrases have been substituted with the phrase "regions that lie outside the regions in which the cams are seated."

There being no rejection of the claims of the prior art, Applicant believes that all the claims are in condition for allowance and respectfully solicits a Notice of Allowance.

Respectfully submitted,



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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

1. (Amended) A method for the manufacture of a cam shaft [form] from a tube, which [is] can be deformed by the action of axial forces and a medium under [a high] an internal pressure, characterized in that [the] bearer rings[, which] are produced in a separate method [and correspond] corresponding to the outline of the cams[, the desired hardness, strength and resistance to wear] on said cam shaft, and are placed in a high internal pressure forming tool together with the tube to be formed and [in that by] subjected to the action of axial forces and a medium under [a high] an internal pressure whereby the bearer rings are attached by expansion of the tube in a frictional and interlocking manner.
2. (Amended) The method as set forth in claim 1, characterized in that in a first method step prior to such high internal pressure forming, [certain region, preferably ends of the tube, which are clear of the region,] regions that lie outside the regions in which the cams are seated, are so kneaded and/or upset that same are increased in thickness and/or are stretched and thus different functional elements are formed.
5. (Amended) The method as set forth in [at least one of the claims 1 through 4,] claim 1, characterized in that the bearer rings are hardened in a known manner prior to being placed in the internal high pressure forming tool.
6. (Amended) The method as set forth in [at least one of the claims 1 through 5,] claim 1, characterized in that a gear wheel or sprocket wheel produced in a separate method is placed in the internal high pressure forming tool and is connected by the internal high pressure forming step frictionally and/or in an interlocking manner.
7. (Amended) The method as set forth in [at least one of the claims 1 through 6,] claim 1, characterized in that after the production of the thickened and/or tapered ends of the cam shaft internal gear teeth and/or a thread is produced by round kneading in an

additional method step integrated in an additional method step as part of this method step.